

Agricultural Waste Management

Guthrie County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6: Okoboji-----	100	Very limited Depth to saturated zone Leaching limitation Restricted permeability	1.00 0.70 0.30	Very limited Depth to saturated zone Restricted permeability	1.00 0.22	Very limited Depth to saturated zone Restricted permeability	1.00 0.22
8B: Judson-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
8C: Judson-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application Too steep for sprinkler application	0.91 0.02
9B: Marshall-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
9C2: Marshall-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application Too steep for sprinkler application	0.91 0.02
9D2: Marshall-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application Too steep for sprinkler application	1.00 0.77

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11B: Colo-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
						Too steep for surface application	0.08
Judson-----	30	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
24B: Shelby-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Restricted permeability Too steep for surface application Too acid	0.22 0.08 0.07
24C2: Shelby-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Too steep for surface application Restricted permeability Too acid Too steep for sprinkler application	0.91 0.22 0.07 0.02
24D2: Shelby-----	100	Somewhat limited Slope Restricted permeability Too acid	0.63 0.30 0.02	Somewhat limited Slope Restricted permeability Too acid	0.63 0.22 0.07	Very limited Too steep for surface application Too steep for sprinkler application Restricted permeability Too acid	1.00 0.77 0.22 0.07
24E2: Shelby-----	100	Very limited		Very limited		Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24E3: Shelby-----	100	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
24F2: Shelby-----	100	Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
24F3: Shelby-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
51A: Vesser-----	95	Very limited		Very limited		Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51A+: Vesser-----	95	Depth to saturated zone	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
		Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
54: Zook-----	100	Very limited Restricted permeability	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00	Restricted permeability	1.00
		Flooding	0.60	Restricted permeability	1.00	Flooding	0.60
		Leaching limitation	0.50				
54+: Zook-----	100	Very limited Restricted permeability	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00	Restricted permeability	1.00
		Flooding	0.60	Restricted permeability	1.00	Flooding	0.60
		Leaching limitation	0.50				
55A: Nicollet-----	95	Somewhat limited Depth to saturated zone	0.02	Somewhat limited Depth to saturated zone	0.02	Somewhat limited Depth to saturated zone	0.02
62C2: Storden-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.91
						Too steep for sprinkler application	0.02

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
62D2: Storden-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application Too steep for sprinkler application	1.00 0.77
62E2: Storden-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00
62F2: Storden-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00
65E2: Lindley-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00
		Restricted permeability	0.30	Too acid	0.31	Too steep for sprinkler application	1.00
		Too acid	0.08	Restricted permeability	0.22	Too acid	0.31
						Restricted permeability	0.22
65F2: Lindley-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00
		Restricted permeability	0.30	Too acid	0.31		

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65F3: Lindley-----	100	Too acid	0.08	Restricted permeability	0.22	Too acid	0.31
						Restricted permeability	0.22
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Too acid	0.31	Too steep for sprinkler application	1.00
65G2: Lindley-----	100	Too acid	0.08	Restricted permeability	0.22	Too acid	0.31
						Restricted permeability	0.22
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Too acid	0.31	Too steep for sprinkler application	1.00
69D2: Clearfield-----	100	Too acid	0.08	Restricted permeability	0.22	Too acid	0.31
						Restricted permeability	0.22
		Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
73D2: Salida-----	100					Too steep for sprinkler application	0.77
		Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
76A: Ladoga-----	100	Droughty	1.00	Droughty	1.00	Droughty	1.00
		Leaching	0.45	Slope	0.37	Too steep for surface	1.00
		limitation				application	
		Slope	0.37			Too steep for sprinkler	0.59
76B: Ladoga-----	100					application	
		Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted	0.30	Restricted	0.22	Restricted	0.22
		permeability		permeability		permeability	
76C: Ladoga-----	100						
		Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted	0.30	Restricted	0.22	Restricted	0.22
		permeability		permeability		permeability	
76C2: Ladoga-----	100					Too steep for surface	0.08
						application	
		Somewhat limited		Somewhat limited			
		Restricted	0.30	Restricted	0.22	Too steep for surface	0.91
76D: Ladoga-----	100					application	
						Restricted	0.22
		Somewhat limited		Somewhat limited		permeability	
		Restricted	0.30	Restricted	0.22	Too steep for sprinkler	0.02
76D2: Ladoga-----	100					application	
		Somewhat limited		Somewhat limited		Too steep for surface	0.91
		Restricted	0.30	Restricted	0.22	application	
76D2: Ladoga-----	100					Restricted	0.22
						permeability	
		Somewhat limited		Somewhat limited		Too steep for sprinkler	0.02
		Restricted	0.30	Restricted	0.22	application	
76D: Ladoga-----	100						
		Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface	1.00
						application	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
76D2: Ladoga-----	100	Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
						Restricted permeability	0.22
		Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited	
						Too steep for surface application	1.00
76E2: Ladoga-----	100	Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
						Restricted permeability	0.22
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
80B: Clinton-----	100	Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
						Restricted permeability	0.22
		Somewhat limited Restricted permeability	0.30	Somewhat limited Restricted permeability	0.22	Somewhat limited Restricted permeability	0.22
		Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
80C2: Clinton-----	100					Too acid	0.07
		Somewhat limited Restricted permeability	0.30	Somewhat limited Restricted permeability	0.22	Somewhat limited Too steep for surface application	0.91
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						Too steep for sprinkler application	0.02
80D2: Clinton-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
80D3: Clinton-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
88: Nevin-----	95	Somewhat limited Depth to saturated zone	0.43	Somewhat limited Depth to saturated zone	0.43	Somewhat limited Depth to saturated zone	0.43
93D2: Shelby-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
Adair-----	35	Very limited		Very limited		Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
93D3: Shelby-----	60	Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
		Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
Adair-----	35	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited	
						Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
93E2: Shelby-----	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
Adair-----	30					Too acid	0.07
		Very limited		Very limited		Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
93E3: Shelby-----	60	Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
						Depth to saturated zone	1.00
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
Adair-----	30	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited	
						Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
95: Harps-----	95					Depth to saturated zone	1.00
		Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited	
107: Webster-----	95					Depth to saturated zone	1.00
		Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Leaching limitation	0.70				
108A: Wadena-----	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
108B: Wadena-----	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity Too steep for surface application	1.00 0.08
108C2: Wadena-----	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application	1.00 0.91 0.02
133A: Colo-----	100	Very limited Depth to saturated zone Leaching limitation Flooding	1.00 0.70 0.60	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
133A+: Colo-----	100	Very limited Depth to saturated zone Leaching limitation Flooding	1.00 0.70 0.60	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
133B: Colo-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						Too steep for surface application	0.08
133B+: Colo-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
						Too steep for surface application	0.08
138B: Clarion-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
138B2: Clarion-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
138C: Clarion-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.91
						Too steep for sprinkler application	0.02
138C2: Clarion-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.91
						Too steep for sprinkler application	0.02
138D2: Clarion-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
138E: Clarion-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Too steep for sprinkler application	0.77
						Very limited Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
179D2: Gara-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited	
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.77
179E2: Gara-----	100	Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
						Very limited	
						Too steep for surface application	1.00
179F2: Gara-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Too steep for sprinkler application	1.00
						Too steep for surface application	1.00
						Restricted permeability	0.22
179G2: Gara-----	100	Very limited		Very limited		Very limited	
						Too steep for surface application	1.00
						Too steep for sprinkler application	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192D2: Adair-----	100	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
						Restricted permeability	0.22
		Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
192E2: Adair-----	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
						Depth to saturated zone	1.00
192E3: Adair-----	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
						Depth to saturated zone	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
201B: Olmitz-----	50	Not limited		Not limited		Somewhat limited Too steep for surface application	0.31
Colo-----	30	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Too steep for surface application	1.00 1.00 0.08
203: Cylinder-----	95	Very limited Filtering capacity Depth to saturated zone	1.00 0.43	Very limited Filtering capacity Depth to saturated zone	1.00 0.43	Very limited Filtering capacity Depth to saturated zone	1.00 0.43
212: Kennebec-----	95	Somewhat limited Flooding	0.60	Very limited Flooding	1.00	Somewhat limited Flooding	0.60
220: Nodaway-----	95	Somewhat limited Flooding	0.60	Very limited Flooding	1.00	Somewhat limited Flooding	0.60
222C2: Clarinda-----	100	Very limited Restricted permeability Depth to saturated zone Runoff limitation Too acid	1.00 1.00 0.40 0.02	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 1.00 0.07	Very limited Restricted permeability Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.91 0.07 0.02
222D2: Clarinda-----	100	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.07	Too steep for sprinkler application	0.77
		Too acid	0.02			Too acid	0.07
236B: Lester-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
236C2: Lester-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application Too steep for sprinkler application	0.91 0.02
236D2: Lester-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application Too steep for sprinkler application	1.00 0.77
269: Humeston-----	100	Very limited Restricted permeability Depth to saturated zone Flooding Leaching limitation Too acid	1.00 1.00 0.60 0.50 0.02	Very limited Restricted permeability Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.07	Very limited Restricted permeability Depth to saturated zone Flooding Too acid	1.00 1.00 0.60 0.07
273B: Olmitz-----	100	Not limited		Not limited		Somewhat limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						Too steep for surface application	0.08
273C: Olmitz-----	100	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.91
						Too steep for sprinkler application	0.02
308A: Wadena-----	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
308B: Wadena-----	100	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
						Too steep for surface application	0.08
308C: Wadena-----	100	Very limited Filtering capacity Slope	1.00 0.16	Very limited Filtering capacity Slope	1.00 0.16	Very limited Filtering capacity Too steep for surface application	1.00 1.00
						Too steep for sprinkler application	0.39
313E2: Gosport-----	100	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Too steep for surface application	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Too steep for sprinkler application	0.97
		Droughty	0.50	Droughty	0.50	Depth to saturated zone	0.95
		Depth to bedrock	0.46	Depth to bedrock	0.46	Droughty	0.50

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
313F2: Gosport-----	100	Restricted permeability	0.30	Restricted permeability	0.22	Depth to bedrock	0.46
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Too steep for surface application	1.00
		Droughty	0.50	Droughty	0.50	Too steep for sprinkler application	1.00
		Depth to bedrock	0.46	Depth to bedrock	0.46	Depth to saturated zone	0.95
315: Alluvial Land-----	90	Restricted permeability	0.30	Restricted permeability	0.22	Droughty	0.50
		Not rated		Not rated		Depth to bedrock	0.46
318F: Clanton-----	100	Very limited Slope	1.00	Very limited Slope	1.00		
		Restricted permeability	1.00	Restricted permeability	1.00	Very limited	
						Restricted	1.00
						permeability	
						Too steep for surface application	1.00
354: Marsh-----	95	Too steep for sprinkler application	1.00	Too steep for sprinkler application	1.00	Too steep for sprinkler application	1.00
		Not rated		Not rated		Not rated	
368: Macksburg-----	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted	0.22
		Too acid	0.02	Too acid	0.07	permeability	
						Too acid	0.07

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
370A: Sharpsburg-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Restricted permeability Too acid	0.22 0.07
370B: Sharpsburg-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Restricted permeability Too steep for surface application Too acid	0.22 0.08 0.07
370C: Sharpsburg-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Too steep for surface application Restricted permeability Too acid Too steep for sprinkler application	0.91 0.22 0.07 0.02
370C2: Sharpsburg-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Too steep for surface application Restricted permeability Too acid Too steep for sprinkler application	0.91 0.22 0.07 0.02
370D: Sharpsburg-----	100	Somewhat limited Slope Restricted permeability	0.63 0.30	Somewhat limited Slope Restricted permeability	0.63 0.22	Very limited Too steep for surface application Too steep for sprinkler application	1.00 0.77

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
370D2: Sharpsburg-----	100	Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
370E2: Sharpsburg-----	100	Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
415D: Montieth-----	100	Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited Droughty	1.00	Very limited Droughty	1.00	Very limited	
						Too steep for surface application	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Droughty	1.00
415E: Montieth-----	100	Slope	0.63	Slope	0.63	Filtering capacity	1.00
		Depth to bedrock	0.26	Depth to bedrock	0.26	Too steep for sprinkler application	0.77
						Depth to bedrock	0.26
		Too acid	0.02	Too acid	0.07		
		Very limited Droughty	1.00	Very limited Droughty	1.00	Very limited	
						Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
415F: Montieth-----	100	Filtering capacity	1.00	Filtering capacity	1.00	Too steep for sprinkler application	1.00
		Depth to bedrock	0.26	Depth to bedrock	0.26	Filtering capacity	1.00
		Too acid	0.02	Too acid	0.07	Depth to bedrock	0.26
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited	
						Too steep for surface application	1.00
		Droughty	1.00	Droughty	1.00	Too steep for sprinkler application	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Droughty	1.00
		Depth to bedrock	0.26	Depth to bedrock	0.26	Filtering capacity	1.00
		Too acid	0.02	Too acid	0.07	Depth to bedrock	0.26
416E: Hesch-----	100	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Too steep for surface application	1.00
		Slope	0.96	Slope	0.96	Filtering capacity	1.00
		Droughty	0.74	Droughty	0.74	Too steep for sprinkler application	0.97
		Depth to bedrock	0.46	Depth to bedrock	0.46	Droughty	0.74
417D: Hesch-----	100	Too acid	0.11	Too acid	0.42	Depth to bedrock	0.46
		Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63	Filtering capacity	1.00
		Depth to bedrock	0.46	Depth to bedrock	0.46	Too steep for sprinkler application	0.77
		Droughty	0.39	Too acid	0.42	Depth to bedrock	0.46
		Too acid	0.11	Droughty	0.39	Too acid	0.42

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
417E: Hesch-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Too steep for sprinkler application	1.00
		Depth to bedrock	0.46	Depth to bedrock	0.46	Filtering capacity	1.00
		Droughty	0.39	Too acid	0.42	Depth to bedrock	0.46
		Too acid	0.11	Droughty	0.39	Too acid	0.42
428B: Ely-----	95	Somewhat limited Depth to saturated zone	0.43	Somewhat limited Depth to saturated zone	0.43	Somewhat limited Depth to saturated zone	0.43
						Too steep for surface application	0.08
485A: Spillville-----	95	Somewhat limited Flooding	0.60	Very limited Flooding	1.00	Somewhat limited Flooding	0.60
507: Canisteo-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Leaching limitation	0.70				
585B: Colo-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
						Too steep for surface application	0.08
Spillville-----	30	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
615B: Colo-----	60	Very limited		Very limited		Very limited	

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Too steep for surface application	0.08
Spillville-----	30	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.08
675C2: Dickinson-----	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.34	Droughty	0.34	Too steep for surface application	0.91
						Droughty	0.34
						Too steep for sprinkler application	0.02
Sharpsburg-----	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for surface application	0.91
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
						Too steep for sprinkler application	0.02
675D2: Dickinson-----	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63	Filtering capacity	1.00
		Droughty	0.34	Droughty	0.34	Too steep for sprinkler application	0.77
						Droughty	0.34
Sharpsburg-----	40	Somewhat limited		Somewhat limited		Very limited	

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
733: Calco-----	100	Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability	0.22
						Too acid	0.07
		Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Leaching limitation	0.70	Flooding	1.00	Flooding	0.60
		Flooding	0.60				
822D2: Lamoni-----	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Too acid	0.01	Too acid	0.01	Too steep for sprinkler application	0.77
						Too acid	0.01
822E2: Lamoni-----	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Too acid	0.01	Too acid	0.01	Depth to saturated zone	1.00
						Too acid	0.01
993E2: Gara-----	60	Very limited		Very limited		Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Armstrong-----	30	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
						Restricted permeability	0.22
		Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Too steep for sprinkler application	1.00
C133A: Colo-----	95	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
						Depth to saturated zone	1.00
		Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Leaching limitation	0.70				
C220: Nodaway-----	90	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
T9B: Marshall-----	100	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
T76B: Ladoga-----	100	Somewhat limited Restricted permeability	0.30	Somewhat limited Restricted permeability	0.22	Somewhat limited Restricted permeability	0.22
						Too steep for surface application	0.08

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
T370B: Sharpsburg-----	100	Somewhat limited Restricted permeability Too acid	0.30 0.02	Somewhat limited Restricted permeability Too acid	0.22 0.07	Somewhat limited Restricted permeability Too steep for surface application Too acid	0.22 0.08 0.07
W: Water-----	100	Not rated		Not rated		Not rated	